Commonwealth of Kentucky

Natural Resources and Environmental Protection Cabinet
Department for Environmental Protection
Division for Air Quality
803 Schenkel Lane
Frankfort, Kentucky 40601
(502) 573-3382

Title V

AIR QUALITY PERMIT

Issued under 401 KAR 52:020

Permittee Name: Thoroughbred Generating Station Company, LLC
Mailing Address: 701 Market Street, 6th Floor, St. Louis, MO 63101

is authorized to construct and operate an electric power generating plant at Muhlenberg County, Kentucky

Source Name: Thoroughbred Generating Station
Mailing Address: 701 Market Street, 6th Floor, St. Louis, MO 63101
Source Location: Graham, KY 42334

Permit Number: V-02-XXX
Log Number: 53619
SIC Code: 4911
Review Type: Title V/PSD
Source ID #: 21-177-00077
Oris Code: **55462**

Region: Paducah - Cairo
County: Muhlenberg

Application Complete Date: April 23, 2001
Issuance Date:
Expiration Date:

John Lyons, Director
Division for Air Quality

1/16/2001

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SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application, the Kentucky Division for Air Quality hereby authorizes the construction and operation of the processing and air pollution control equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto and shall become the final permit unless the U.S.EPA files an objection pursuant to 401 KAR 52:100, Section 10.

The permittee shall not construct, reconstruct, or modify any emissions units without having first submitted a complete application to the permitting authority and received a permit for the planned activity, except as provided in this permit or in Regulation 401 KAR 52:020, Title V Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emissions Unit 01 and 02 Pulverized Coal Fired Steam Electric Generating Units (SGU001 & SGU002)

Description:

Pulverized Coal Fired Units, equipped with Selective Catalytic Reduction (SCR); Particulate Control Device; Wet Flue Gas Desulfurization (FGD); and Wet Electrostatic Precipitator (WESP)
Number two fuel oil or natural gas used for startup and stabilization
Nominal rating 7,446 MMBTU/hour each
Construction Commence Date: Estimated Early 2002

Applicable Regulations:

Regulation 401 KAR 59:016, New electric utility steam generating units incorporating by reference 40 CFR 60, Subpart Da, Standards of performance for electric utility steam generating units applicable to an emission unit with a capacity of more than 250 mmBTU per hour and commenced on or after September 19, 1978.
Regulation 401 KAR 51:017, Prevention of significant deterioration of air quality applicable to major construction or modification commenced after September 22, 1982.
Regulation 63:020, Potentially Hazardous Matter or Toxic Substances
Regulation 40 CFR 63, Subpart B
Regulation 40 CFR 60, Appendix F, Quality Assurance Procedures
Regulation 40 CFR 64, Compliance Assurance Monitoring
Regulation 40 CFR Part 75
Regulation 40 CFR Part 70

1. **Operating Limitations:**
   None

2. **Emission Limitations:**

   a) Pursuant to Regulations 401 KAR 59:016, Section 3(1)(b), and 401 KAR 51:017, particulate emissions shall not exceed 0.018 lb/MMBTU heat input from each unit based on a three-hour average. Pursuant to Regulation 401 KAR 59:016, Section 6(1), compliance with the 0.018 lb/MMBTU emission limitation shall constitute compliance with the 99% reduction requirement contained in Regulation 401 KAR 59:016, Section 3(1)(b).

   b) Pursuant to Regulation 401 KAR 59:016, Section 3(2), emissions from each unit shall not exceed twenty (20) percent opacity based on a six-minute average except that a maximum of twenty-seven (27) percent is allowed for not more than one (1) six (6) minute period per hour.

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c) Pursuant to Regulations 401 KAR 59:016, Section 4(1) and 401 KAR 51:017, sulfur dioxide emissions shall not exceed 0.167 lbs/MMBTU from each unit based on a thirty (30) day rolling average.

d) Pursuant to Regulations 401 KAR 51:017, carbon monoxide emissions shall not exceed 0.10 lbs/MMBTU from each unit based on a thirty (30) day rolling average.

e) Pursuant to Regulations 401 KAR 59:016, Section 5(1)(c) and 401 KAR 51:017, nitrogen oxides emissions shall not exceed 0.09 lbs/MMBTU from each unit based on a thirty (30) day rolling average. Pursuant to Regulation 401 KAR 59:016, Section 6(2), compliance with the 0.09 lb/MMBTU emission limitation shall constitute compliance with the 65% reduction requirement contained in Regulation 401 KAR 59:016, Section 5(2).

f) Pursuant to Regulations 401 KAR 51:017, VOC emissions shall not exceed 0.0072 lbs/MMBTU from each unit.

g) Pursuant to Regulations 401 KAR 51:017, beryllium emissions shall not exceed 0.000000944 lbs/MMBTU from each unit.

h) Pursuant to Regulations 401 KAR 51:017, sulfuric acid mist emissions shall not exceed 0.00497 lbs/MMBTU from each unit.

i) Pursuant to Regulations 401 KAR 51:017, hydrogen fluoride emissions shall not exceed 0.000159 lbs/MMBTU from each unit.

j) Pursuant to Regulations 401 KAR 51:017, mercury emissions shall not exceed 0.00000321 lbs/MMBTU from each unit.

k) Particulate matter; nitrogen oxides; sulfur dioxide; carbon monoxide; VOC; beryllium; sulfuric acid mist; hydrogen fluoride; and mercury emission standards apply at all times except during periods of startup, shutdown, or malfunction.

3. Testing Requirements:

a) The permittee shall demonstrate compliance with the applicable emission standards within sixty (60) days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility. Opacity data from the Continuous Opacity Monitor (COM) during the performance test for particulate shall be correlated with the particulate emissions rate to establish an average opacity level pursuant to Condition 4.b below.

b) If no additional stack tests are performed pursuant to Condition 4.b, the permittee shall conduct a performance test for particulate emissions within the third year of the term of this permit to demonstrate compliance with the allowable standard.

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c) The permittee shall determine the opacity of emissions from the stack by EPA Reference Method 9 annually, or more frequently if requested by the Division.

d) See Section D

4. Specific Monitoring Requirements:

a) Pursuant to Regulation 401 KAR 52:020; Regulation 401 KAR 59:016, Section 7; and Regulation 401 KAR 59:005, Section 4, the permittee shall install, calibrate, maintain, and operate continuous emission monitoring systems for measuring the opacity of emissions, sulfur dioxide emissions, nitrogen oxides emissions and either oxygen or carbon dioxide emissions. Oxygen or carbon dioxide shall be monitored at each location where sulfur dioxide or nitrogen oxides emissions are monitored. The owner or operator shall ensure the continuous emission monitoring systems are in compliance with the requirements of Regulation 401 KAR 59:005, Section 4.

b) Pursuant to Regulation 401 KAR 52:020 and Regulation 401 KAR 59:016, Section 7(1), to meet the periodic monitoring requirement for particulate, the permittee shall use a continuous opacity monitor (COM). The average opacity level determined pursuant to condition 3.a above, plus 5% opacity will become the opacity trigger level. Excluding the startup, shut down, and once per hour exemption periods, if any six-minute average opacity (averaged over a period of 3 hours) value exceeds the opacity trigger level, the permittee shall, as appropriate, initiate an inspection of the control equipment and/or the COM system and make any necessary repairs. If five (5) percent or greater of COM data (excluding startup, shut down, and malfunction periods, data averaged over a three hour period) recorded in a calendar quarter show excursions above the opacity trigger level, the permittee shall perform a stack test in the following calendar quarter to demonstrate compliance with the particulate standard while operating at representative conditions. The permittee shall submit a compliance test protocol as required by condition Section G(a)(19) of this permit before conducting the test. The Division may waive this testing requirement upon a demonstration that the cause(s) of the excursions have been corrected, or may require stack tests at any time pursuant to Regulation 401 KAR 50:045, Performance Tests.

c) Pursuant to Regulation 401 KAR 52:020 and Regulation 401 KAR 59:016, Section 7(1), to meet the periodic monitoring requirement for opacity, the permittee shall use a continuous opacity monitor (COM). The permittee shall perform a qualitative visual observation of the opacity of emissions from each stack on a monthly basis and maintain a log of the observations. If visible emissions from any stack are perceived or believed to exceed the applicable standard, the permittee shall determine the opacity of emissions by Reference Method 9 and perform an inspection of the control equipment and make any necessary repairs. Observations shall revert to weekly if visible emissions, which would trigger Reference Method 9 determinations or equipment repairs, are observed during any monthly observation. Weekly observations shall continue until such time that no visible emissions, which would trigger Reference Method 9 determinations or equipment repairs, are observed during any three consecutive week period.

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d) Pursuant to Regulation 401 KAR 52:020 and Regulation 401 KAR 59:016, Section 7(2), to meet the periodic monitoring requirement for sulfur dioxide, the permittee shall use a continuous emission monitor (CEM). Excluding the startup and shut down periods, if any 30 day rolling average sulfur dioxide value exceeds that standard, the permittee shall, as appropriate, initiate an inspection of the control equipment and/or the CEM system and make any necessary repairs as soon as practicable.

e) Pursuant to Regulation 401 KAR 52:020 and Regulation 401 KAR 59:016, Section 7(3), to meet the periodic monitoring requirement for nitrogen oxide, the permittee shall use a continuous emission monitor (CEM). Excluding the startup and shut down periods, if any 30 day rolling average nitrogen oxide value exceeds the standard, the permittee shall, as appropriate, initiate an inspection of the control equipment and/or CEM system and make any necessary repairs or take any corrective actions as soon as practicable.

f) Pursuant to Regulation 401 KAR 52:020 and Regulation 401 KAR 51:017, and Regulation 401 KAR 59:016, Section 7(2), the permittee shall monitor sulfur dioxide emission using a continuous monitoring system.

g) Pursuant to Regulation 401 KAR 52:020 and Regulation 401 KAR 59:016, Section 7(5), all the continuous emission monitoring systems shall be operated and data shall be recorded during all periods of operation of the emissions units including periods of startup, shutdown, malfunction or emergency conditions, except for continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments.

h) Pursuant to Regulation 401 KAR 52:020 and Regulation 401 KAR 59:016, Section 7(6), when emission data are not obtained because of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments, the permittee shall obtain emission data by using other monitoring systems as approved by the Division or the reference methods as described in Regulation 401 KAR 59:016, Section 7(8) to provide emission data for a minimum of eighteen hours in at least twenty-two out of thirty successive boiler operating days.

i) Pursuant to Regulation 401 KAR 59:016, Section 7(9), the following procedures shall be used to conduct monitoring system performance evaluations and calibration checks as required under Regulation 401 KAR 59:005, Section 4(3).

1. Reference Method 6 or 7, as applicable shall be used for conducting performance evaluations of sulfur dioxide and nitrogen oxides continuous emission monitoring systems.

2. Sulfur dioxide or nitrogen oxides, as applicable, shall be used for preparing calibration mixtures under Performance Specification 2 of Appendix B to 40 CFR 60 filed by reference in Regulation 401 KAR 50:015.

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3. The span value for the continuous monitoring system for measuring opacity shall be between sixty (60) and eight (80) percent and the continuous monitoring system for measuring nitrogen oxides shall be 1,000 ppm.

4. The span value for the continuous monitoring system for measuring sulfur dioxide at the inlet to the sulfur dioxide control device shall be 25 percent of the maximum estimated hourly potential emissions of the fuel fired, and at the outlet of the control device shall be 50 percent of the maximum estimated hourly potential emissions of the fuel fires, or span values as specified in 40 CFR 75, Appendix A.

j) The permittee shall take a grab sample of the fuel "as fired" to the PCs on a quarterly basis. The samples taken on a quarterly basis shall be analyzed to determine beryllium; fluorides as HF; and mercury content. This data, along with the baseline data established during the initial compliance test, shall be used to demonstrate compliance with the emission limits for this pollutant.

k) The permittee shall submit a compliance assurance monitoring plan (CAM) for the emission units 1 & 2 and receive written approval from the Division prior to operation in accordance with provision in Regulation 40 CFR 64.4.

5. Specific Record Keeping Requirements:

a) Pursuant to Regulation 401 KAR 59:005, Section 3(4), the owner or operator of the indirect heat exchanger shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems and devices; and all other information required by Regulation 401 KAR 59:005 recorded in a permanent form suitable for inspection.

b) Pursuant to Regulation 401 KAR 59:005, Section 3(2), the owner or operator of this unit shall maintain the records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the affected facility, any malfunction of the air pollution control equipment; or any period during which a continuous monitoring system or monitoring device is inoperative.

c) The permittee shall compute and record percentage of the COM data (excluding startup, shut down, and malfunction data) showing excursions above the opacity trigger level in each calendar quarter.

d) The permittee shall maintain the results of all compliance tests.

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6. Specific Reporting Requirements:

a) Pursuant to Regulation 401 KAR 59:005, Section 3(3), minimum data requirements which follow shall be maintained and furnished in the format specified by the Division. Owners or operators of facilities required to install continuous monitoring systems shall submit for every calendar quarter a written report of excess emissions (as defined in applicable sections) to the Division. All quarterly reports shall be postmarked by the thirtieth (30th) day following the end of each calendar quarter and shall include the following information:

1) The magnitude of the excess emission computed in accordance with the Regulation 401 KAR 59:005, Section 4(8), any conversion factors used, and the date and time of commencement and completion of each time period of excess emissions.

2) All hourly averages shall be reported for sulfur dioxide and nitrogen oxides monitors. The hourly averages shall be made available in the format specified by the Division.

3) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventive measures adopted.

4) The date and time identifying each period during which continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

5) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

6) For sulfur dioxide and nitrogen oxides, all information listed in Regulation 401 KAR 59:016, Section 9(2)(a) through (i), shall be reported to the Division for each twenty-four (24) hour period.

7) If the minimum quantity of emission data as required by Regulation 401 KAR 59:016, Section 7 is not obtained for any thirty successive boiler operating days, the permittee shall report all the information listed in Regulation 401 KAR 59:016, Section 9(3) for that thirty day period.

8) If any sulfur dioxide standards as specified in Regulation 401 KAR 59:016, Section 4(a and b) are exceeded during emergency conditions because of control system malfunction, the permittee shall submit a signed statement including all information as described in Regulation 401 KAR 59:016, Section 9(4).

9) For any periods for which opacity, sulfur dioxide or nitrogen oxides emissions data are not available, the permittee shall submit a signed statement pursuant to Regulation 401 KAR 59:016, Section 9(6) indicating if any changes were made in the operation of the emission control system during the period of data unavailability. Operations of

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control system and emissions units during periods of data unavailability are to be compared with operation of the control system and emissions units before and following the period of data unavailability.

10) The permittee shall submit a signed statement including all information as described in Regulation 401 KAR 59:016, Section 9(7).

11) Pursuant to Regulation 401 KAR 59:016, Section 9(8), for the purposes of the reports required under Regulation 401 KAR 59:005, Section 4, periods of excess emissions are defined as all six (6) minute periods during which the average opacity exceeds the applicable opacity standards as specified in Subsection 2 of this section. Opacity levels in excess of the applicable opacity standard and the date of such excesses are to be submitted to the Division each calendar quarter.

b) The permittee shall report the number of excursions (excluding startup, shut down, malfunction data) above the opacity trigger level, date and time of excursions, opacity value of the excursions, and percentage of the COM data showing excursions above the opacity trigger level in each calendar quarter to the Division Regional Office.

7. Specific Control Equipment Operating Conditions:

a) The PC, Particulate Control Device, WFGD, WESP, and SCR shall be operated as necessary to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and / or standard operating practices.

b) A compliance demonstration for the FGD, flue gas desulfurization system, must be completed within 180 days of start-up. If compliance with the 0.167 lb/mmBTU sulfur dioxide emissions limit is not met within this initial compliance period, operations at the facility must be suspended until all necessary modifications to control equipment are completed. During this period, the facility can be in operation only for the purpose of demonstrating compliance.

c) Sulfur dioxide emissions (in pounds) will be calculated monthly based on CEMS data. If the total of the sulfur dioxide emissions exceeds the maximum allowable for any consecutive six month period, operations at the facility will be suspended until all necessary modifications to control equipment are completed. During this maintenance period, the facility can be in operation only for the purpose of demonstrating compliance.

d) Records regarding the maintenance of the control equipment shall be maintained.

e) See Section E for further requirements.

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Emissions Unit 03 Auxiliary Boiler AB001

Description:
300 MMBTU/hr low sulfur diesel fired auxiliary boiler
Construction Commenced Date: estimated early 2002

Applicable Regulations:

Regulation 40 CFR 60, Subpart Db, Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units, incorporated by reference in regulation 401 KAR 60:005, Section 3(1)(b).
Regulation 401 KAR 59:015, New indirect heat exchangers
Regulation 401 KAR 63:020, Potentially Hazardous Matter or Toxic Substances
Regulation 40 CFR 60, Appendix F, Quality Assurance Procedures
Regulation 401 KAR 51:017, Prevention of significant deterioration of air quality applicable to major construction or modification commenced after September 22, 1982.

1. **Operating Limitations:**
   The auxiliary boiler will only operate during start-up periods of one utility boiler or when no utility boilers are in operation [500 hours or less per year self imposed restriction].

2. **Emission Limitations:**

   a) Pursuant to Regulations 401 KAR 60:005, Section 3(1)(b), 401 KAR 59:015, Section 4(1)(b), and 401 KAR 51:017, particulate emissions shall not exceed 0.06 lb/MMBTU heat input based on a three-hour average.

   b) Pursuant to Regulation 401 KAR 59:015, Section 4(2)(a), emissions from the utility boilers shall not exceed twenty (20) percent opacity based on a six-minute average except that a maximum of twenty-seven (27) percent is allowed for not more than one (1) six (6) minute period per hour.

   c) Pursuant to Regulations 401 KAR 60:005, Section 3(1)(b); 401 KAR 59:015, Section 5(1)(b); and 401 KAR 51:017, sulfur dioxide emissions shall not exceed 0.05 lbs/MMBTU based on a three-hour average.

   d) Pursuant to Regulations 401 KAR 51:017, carbon monoxide emissions shall not exceed 0.06 lbs/MMBTU based on a thirty (30) day rolling average.

   e) Pursuant to Regulations 401 KAR 60:005, Section 3(1)(b); 401 KAR 59:015, Section 6(1)(b); and 401 KAR 51:017, nitrogen oxides emissions shall not exceed 0.12 lbs/MMBTU based on a three-hour average.

   f) Pursuant to Regulations 401 KAR 51:017, VOC emissions shall not exceed 0.03 lbs/MMBTU based on a thirty (30) day rolling average.

   g) Particulate matter, nitrogen oxides, and sulfur dioxide emission standards apply at all times except during periods of startup, shutdown, or malfunction.

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3. Testing Requirements:

a) The permittee shall demonstrate compliance with the applicable emission standards within sixty (60) days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility.

b) If the unit has operated during the previous 12 consecutive months, the permittee shall determine the opacity of emissions from the stack by EPA Reference Method 9 annually, or more frequently if requested by the Division.

c) See Section D

4. Specific Monitoring Requirements:

a) Pursuant to Regulation 401 KAR 52:020; Regulation 401 KAR 60:005; Regulation 401 KAR 59:015, Section 7; and Regulation 401 KAR 59:005, Section 4, the permittee shall install, calibrate, maintain, and operate continuous emission monitoring systems or use other monitoring methods as allowed by regulation, for measuring the opacity of emissions, sulfur dioxide emissions, nitrogen oxides emissions and either oxygen or carbon dioxide emissions. Oxygen or carbon dioxide shall be monitored at each location where sulfur dioxide or nitrogen oxides emissions are monitored. The owner or operator shall ensure the continuous emission monitoring systems are in compliance with the requirements of Regulation 401 KAR 59:005, Section 4.

b) Pursuant to Regulation 401 KAR 52:020; 401 KAR 51:017; and Regulation 401 KAR 59:015, to meet the periodic monitoring requirement for sulfur dioxide, the permittee shall use a continuous emission monitor (CEM).

c) Pursuant to Regulation 401 KAR 52:020; 401 KAR 51.:017; and Regulation 401 KAR 59:015, to meet the periodic monitoring requirement for nitrogen oxide, the permittee shall use a continuous emission monitor (CEM)..

d) Pursuant to Regulation 401 KAR 52:020; Regulation 401 KAR 59:015; and 401 KAR 51:017 all the continuous emission monitoring systems shall be operated and data shall be recorded during all periods of operation of the emissions units including periods of startup, shutdown, malfunction or emergency conditions, except for continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments.

e) Pursuant to Regulation 401 KAR 59:015, Section 7(3), the following procedures shall be used to conduct monitoring system performance evaluations and calibration checks as required under Regulation 401 KAR 59:005, Section 4(3).

1. Reference Method 6 or 7, as applicable shall be used for conducting performance evaluations of sulfur dioxide and nitrogen oxides continuous emission monitoring systems.

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2. Sulfur dioxide or nitrogen oxides, as applicable, shall be used for preparing calibration mixtures under Performance Specification 2 of Appendix B to 40 CFR 60 filed by reference in Regulation 401 KAR 50:015.

3. The span value for the continuous monitoring system for measuring opacity shall be 80, 90, or 100 percent and the continuous monitoring system shall be 500 ppm for measuring nitrogen oxides and 1,000 ppm for measuring sulfur oxides.

5. Specific Record Keeping Requirements:

a) Pursuant to Regulation 401 KAR 59:005, Section 3(4), the owner or operator of the indirect heat exchanger shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems and devices; and all other information required by Regulation 401 KAR 59:005 recorded in a permanent form suitable for inspection.

b) Pursuant to Regulation 401 KAR 59:005, Section 3(2), the owner or operator of this unit shall maintain the records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the affected facility, any malfunction of the air pollution control equipment; or any period during which a continuous monitoring system or monitoring device is inoperative.

c) The permittee shall maintain the results of all compliance tests.

6. Specific Reporting Requirements:

a) Pursuant to Regulation 401 KAR 59:005, Section 3(3), minimum data requirements which follow shall be maintained and furnished in the format specified by the Division. Owners or operators of facilities required to install continuous monitoring systems shall submit for every calendar quarter a written report of excess emissions (as defined in applicable sections) to the Division. All quarterly reports shall be postmarked by the thirtieth (30th) day following the end of each calendar quarter and shall include the following information:

1) The magnitude of the excess emission computed in accordance with the Regulation 401 KAR 59:005, Section 4(8), any conversion factors used, and the date and time of commencement and completion of each time period of excess emissions.

2) All hourly averages shall be reported for sulfur dioxide and nitrogen oxides monitors. The hourly averages shall be made available in the format specified by the Division.

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3) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventive measures adopted.

4) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

5) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

b) The permittee shall report the number of excursions (excluding startup, shut down, malfunction data) above the opacity trigger level, date and time of excursions, opacity value of the excursions, and percentage of the COM data showing excursions above the opacity trigger level in each calendar quarter to the Division Regional Office.

7. Specific Control Equipment Operating Conditions:

a) The boiler shall be operated in accordance with manufacturer's specifications and / or standard operating practices.

b) See Section E for further requirements.

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Emissions Unit 04 Coal Handling Systems

Description:

Machine Point 01 - CDC001	Convey and Transfer (Stockout)
Machine Point 02 - CDC002a	Convey and Transfer (Reclaim Primary)
Machine Point 03 - CDC002b	Convey and Transfer (Reclaim Secondary)
Machine Point 04 - CDC003	Crusher Tower and Convey
Machine Point 05 - CDC004	Convey and Plant Surge Bin
Machine Point 06 - CDC005	Silo 1 East
Machine Point 07 - CDC006	Silo 1 West
Machine Point 08 - CDC007	Silo 2 East
Machine Point 09 - CDC008	Silo 2 West
Machine Point 10 - CFD004	Stacker/Reclaim(while in reclaim operation)
Machine Point 11 - CFD005	Convey/Transfer(while in reclaim operation)
Machine Point 12 - CFD007	Secondary Reclaim Endloader

Control Equipment:

Enclosures and Baghouse	Machine Points 01 – 05
Bin Filters	Machine Points 06 – 09
Partial Enclosure/Low Drop/ Filter	Machine Point 11

Operating Rate:

2000 tons/hour (each transfer)	Machine Point 01 - 4 transfers
	Machine Point 10 -12
1000 tons/hour (each transfer)	Machine Point 02 - 2 transfers
	Machine Point 04 – 8 transfers
	Machine Point 05 – 6 transfers
	Machine Point 06 – 3 transfers
	Machine Point 07 – 3 transfers
	Machine Point 08 – 3 transfers
	Machine Point 09 – 3 transfers
500 tons/hour (each transfer)	Machine Point 03 – 2 transfers

Construction Commenced Date: Estimated Early 2002

Applicable Regulations:

Regulation 401 KAR 60:005, which incorporates by reference 40 CFR 60 Subpart Y, Standards of Performance for Coal Preparation Plants
Regulation 401 KAR 51:017, Prevention of significant deterioration of air quality applicable to major construction or modification commenced after September 22, 1982.

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1. Operating Limitations:

None

2. Emission Limitations:

Pursuant to 40 CFR 60.252, the owner or operator shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal, gases which exhibit 20 percent opacity or greater.

3. Testing Requirements:

Pursuant to Regulation 401 KAR 60:254, the permittee shall determine the opacity of emissions from each stack by EPA Reference Method 9 annually, or more frequently if requested by the Division.

4. Specific Monitoring Requirements:

The permittee shall perform a qualitative visual observation of the opacity of emissions from each stack on a monthly basis and maintain a log of the observations. If visible emissions from any stack are perceived or believed to exceed the applicable standard, the permittee shall determine the opacity of emissions by Reference Method 9 and perform an inspection of the control equipment for any necessary repairs.

5. Specific Record Keeping Requirements:

a) The permittee shall maintain the records of amount of coal received and processed.

b) The permittee shall maintain the results of all compliance tests.

6. Specific Reporting Requirements:

See Section F, Conditions 5, 6, 7 and 8.

7. Specific Control Equipment Operating Conditions:

a) The control equipment shall be operated as necessary to maintain compliance with applicable requirements, in accordance with manufacturer's specifications and/or standard operating practices.

b) Records regarding the maintenance of the control equipment shall be maintained.

c) See Section E for further requirements.

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Emissions Unit 05 Coal Handling System

Description:

Machine Point 01 - CFD001	Stacker Operation
Machine Point 02 - CFD002	Stacker Operation
Machine Point 03 - CFD003	Stacker/Reclaim (while in stacker operation)
Machine Point 04 - CFD006	Secondary Stacker

Control Equipment:

Partial Enclosures/Low Drops	Machine Points 01 - 04
Telescopic Chute and Low Drop	Machine Point 03 and 04

Operating Rate:

2000 tons/year	Machine Points 01 - 04

Construction Commenced Date: Estimated Early 2002

Applicable Regulations:

Regulation 401 KAR 63:010, Fugitive emissions
Regulation 401 KAR 51:017, Prevention of significant deterioration of air quality applicable to major construction or modification commenced after September 22, 1982.

Applicable Requirements:

a) Pursuant to Regulation 401 KAR 63:010, Section 3, reasonable precautions shall be taken to prevent particulate matter from becoming airborne. Such reasonable precautions shall include application and maintenance of asphalt, water, or suitable chemicals on roads, material stockpiles, or other surfaces which can create airborne dusts.

b) Pursuant to Regulation 401 KAR 63:010, Section 3, discharge of visible fugitive dust emissions beyond the property line is prohibited.

1. Operating Limitations:

Pursuant to Regulation 401 KAR 63:010, Section 3, reasonable precautions shall be taken to prevent particulate matter from becoming airborne.

2. Emission Limitations:

Pursuant to Regulation 401 KAR 63:010, Section 3, reasonable precautions shall be taken to prevent particulate matter from becoming airborne

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3. Testing Requirements:
None

4. Specific Monitoring Requirements:
None

5. Specific Record Keeping Requirements:

The permittee shall maintain records of the amount of coal received and processed.

6. Specific Reporting Requirements:

See Section F, Conditions 5, 6, 7 and 8.

7. Specific Control Equipment Operating Conditions:

a) The control equipment shall be operated as necessary to maintain compliance with applicable requirements, in accordance with manufacturer's specifications and/or standard operating practices.

b) See Section E for further requirements

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Emissions Unit 06 Coal Piles

Description:

Machine Point 01 – 14a	North Coal Storage Pile
Machine Point 02 – 14a	South Coal Storage Pile
Machine Point 03 – 14b	Secondary Pile
Machine Point 04 – 14c	Emergency Pile
Machine Point 05 – 14d	Endloaders

Control Equipment: Compaction

Operating Rate:

7.72 acres	Machine Point 01
5.65 acres	Machine Point 02
1.84 acres	Machine Point 03
0.72 acres	Machine Point 04
2000 tons/hour	Machine Point 05

Construction Commenced Date: Estimated Early 2002

Applicable Regulations:

Regulation 401 KAR 63:010, Fugitive Emissions
Regulation 401 KAR 51:017, Prevention of significant deterioration of air quality applicable to major construction or modification commenced after September 22, 1982.

Applicable Requirements:

a) Pursuant to Regulation 401 KAR 63:010, Section 3, reasonable precautions shall be taken to prevent particulate matter from becoming airborne.

b) Pursuant to Regulation 401 KAR 63:010, Section 3, discharge of visible fugitive dust emissions beyond the property line is prohibited.

1. **Operating Limitations:**
   None

2. **Emission Limitations:**
   None

3. **Testing Requirements:**
   None

4. **Specific Monitoring Requirements:**
   None

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

5. Specific Record Keeping Requirements:

The permittee shall maintain the records of amount of coal received and processed.

6. Specific Reporting Requirements:

See Section F, Conditions 5, 6, 7 and 8.

7. Specific Control Equipment Operating Conditions:

a) The control equipment shall be operated as necessary to maintain compliance with applicable requirements, in accordance with manufacturer's specifications and/or standard operating practices.

b) Records regarding the maintenance of the control equipment shall be maintained.

c) See Section E for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emissions Unit 07 FGD Reagent Prep Handling

Description:

Machine Point 01 - LDC001	Convey/Transfer Structure 1
Machine Point 02 - LDC002	Convey/Transfer Structure 2
Machine Point 03 - LDC003	Convey/Transfer Structure 3
Machine Point 04 - LDC005	Storage Bins (2)
Machine Point 05 - LFD003	Convey to Pile (Stockout)
Machine Point 06 - LFD004	Pile to Belt (Reclaim)

Control Equipment:

Enclosures / Filters	Machine Points 01 – 03 & 06

Operating Rate:

400 tons/hour (each)	Machine Points 01 – 06

Construction Commenced Date: Estimated Early 2002

Applicable Regulations:

Regulation 401 KAR 60:670, incorporating by reference 40 CFR 60 Subpart OOO, Standards of Performance for Nonmetallic Mineral Processing Plants.
Regulation 401 KAR 51:017, Prevention of significant deterioration of air quality applicable to major construction or modification commenced after September 22, 1982.

1. **Operating Limitations:**
   None

2. **Emission Limitations:**

   a) Pursuant to 401 KAR 51:017, emissions of particulate shall be controlled by a baghouse.

   b) Pursuant to 401 KAR 60:670, emissions of particulate shall not exceed 0.05 gr/dscm and shall not exhibit greater than 7% opacity.

3. **Testing Requirements:**

   a) Pursuant to Regulation 401 KAR 60:670, specifically 40 CFR 60.675(b)(2), the owner and/or operator shall use EPA Reference Method 9 and the procedures in 40 CFR 60.11 to determine opacity, annually.

   b) EPA Reference Method 5 or Method 17 shall be performed as required by the Division to determine particulate matter concentration.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

4. Specific Monitoring Requirements:

The permittee shall perform a qualitative visual observation of the opacity of emissions from each stack on a monthly basis and maintain a log of the observations. If visible emissions from any stack are perceived or believed to exceed the applicable standard, the permittee shall determine the opacity of emissions by Reference Method 9 and perform an inspection of the control equipment for any necessary repairs.

5. Reporting and Recordkeeping Requirements:

a) Reporting and Recordkeeping shall be done in compliance with the requirements contained within 401 KAR 60:670.

b) Records of the lime processed (tonnage) shall be maintained.

c) See Section F, Conditions 5, 6, 7 and 8.

6. Specific Reporting Requirements:

Pursuant to Regulation 401 KAR 60:670, specifically 40 CFR 60.676, the owner and/or operator shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards of 40 CFR 60.672, including reports of opacity observations made using EPA Reference Method 9.

7. Specific Control Equipment Operating Conditions:

a) The control equipment shall be operated as necessary to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and / or standard operating practices.

b) Records regarding the maintenance of the control equipment shall be maintained.

c) See Section E for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emissions Unit 08 FGD Reagent Prep Handling (Fugitives)

Description:

Machine Point 01 - LFD001	Barge Unload Bucket to Hopper
Machine Point 02 - LFD002	Unload Hopper to Feeder
Machine Point 03	Storage Pile
Machine Point 04	Inactive Pile
Machine Point 05 - LDC004A	Rail Unload
Machine Point 06 - LDC004B	Rail Unload

Control Equipment:

Partial Enclosures / Filters	Machine Points 05 - 06

Operating Rate:

400 tons/hour	Machine Points 01 - 02
0.72 acres	Machine Point 03
1.8 acres	Machine Point 04
200 tons/hour (each)	Machine Points 05 - 06

Construction Commenced Date: Estimated Early 2002

Applicable Regulations:

Regulation 401 KAR 63:010, Fugitive Emissions
Regulation 401 KAR 51:017, Prevention of significant deterioration of air quality applicable to major construction or modification commenced after September 22, 1982.

Applicable Requirements:

a) Pursuant to Regulation 401 KAR 63:010, Section 3, reasonable precautions shall be taken to prevent particulate matter from becoming airborne.

b) Pursuant to Regulation 401 KAR 63:010, Section 3, discharge of visible fugitive dust emissions beyond the property line is prohibited.

1. **Operating Limitations:**
   None

2. **Emission Limitations:**
   None

3. **Testing Requirements:**
   None

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

4. Specific Monitoring Requirements:

None

5. Specific Record Keeping Requirements:

The permittee shall maintain the records of amount of lime received and processed.

6. Specific Reporting Requirements:

See Section F, Conditions 5, 6, 7 and 8.

7. Specific Control Equipment Operating Conditions:

a) The control equipment shall be operated as necessary to maintain compliance with applicable requirements, in accordance with manufacturer's specifications and/or standard operating practices.

b) Records regarding the maintenance of the control equipment shall be maintained.

c) See Section E for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emissions Unit 09 Fly Ash Handling System FADC001A and FADC001B

Description:

Fly Ash Silo Bins (2)	
Control Equipment:	Filter
Operating Rate:	75 tons/hour (each)
Construction Commenced Date:	Estimated Early 2002

Applicable Regulations:

Regulation 401 KAR 59:010, New Process Operations
Regulation 401 KAR 51:017, Prevention of significant deterioration of air quality applicable to major construction or modification commenced after September 22, 1982.

1. **Operating Limitations:**
   None

2. **Emission Limitations:**

   Pursuant to Regulation 401 KAR 59:010, the permittee shall not cause to be discharged into the atmosphere from any of the above mentioned emissions units gases which exhibit twenty (20) percent opacity or greater.

3. **Testing Requirements:**

   Pursuant to Regulation 401 KAR 59:010, the permittee shall determine the opacity of emissions from each stack by EPA Reference Method 9 annually, or more frequently if requested by the Division.

4. **Specific Monitoring Requirements:**

   The permittee shall perform a qualitative visual observation of the opacity of emissions from each stack on a monthly basis and maintain a log of the observations. If visible emissions from any stack are perceived or believed to exceed the 20% opacity standard (averaged on three 6 minute readings), the permittee shall determine the opacity of emissions by Reference Method 9 and if the 20% opacity standard is exceeded, the permittee shall initiate an inspection of the control equipment for any necessary repairs.

5. **Specific Record Keeping Requirements:**

   a) The permittee shall maintain the records of amount of ash processed.

   b) The permittee shall maintain the results of all compliance tests.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

6. Specific Reporting Requirements:

See Section F, Conditions 5, 6, 7 and 8.

7. Specific Control Equipment Operating Conditions:

a) The control equipment shall be operated as necessary to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices.

b) Records regarding the maintenance of the control equipment shall be maintained.

c) See Section E for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emission Unit 10 and 11 Two Cooling Towers CT1 and CT2

Description:

Control Equipment:	0.002% Drift Eliminators
Operating Rate:	345,910 GPM each
Construction Commenced Date:	Estimated Early 2002

Applicable Regulations:

Regulation 401 KAR 63:010, Fugitive emissions
Regulation 401 KAR 51:017, Prevention of significant deterioration of air quality applicable to major construction or modification commenced after September 22, 1982.

Applicable Requirements:

a) Pursuant to Regulation 401 KAR 63:010, Section 3, reasonable precautions shall be taken to prevent particulate matter from becoming airborne.

b) Pursuant to Regulation 401 KAR 63:010, Section 3, discharge of visible fugitive dust emissions beyond the property line is prohibited.

1. Operating Limitations:

Pursuant to Regulation 401 KAR 63:010, Section 3, reasonable precautions shall be taken to prevent particulate matter from becoming airborne.

2. Emission Limitations:

a) Pursuant to regulation 401 KAR 51:017, the cooling towers shall utilize 0.002% Drift Eliminators

b) Pursuant to Regulation 401 KAR 63:010, Section 3, reasonable precautions shall be taken to prevent particulate matter from becoming airborne

3. Testing Requirements:
None

4. Specific Monitoring Requirements:
None

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

5. Specific Record Keeping Requirements:

a) The permittee shall maintain the records of manufacturer's design of the Drift Eliminators.

b) The permittee shall maintain records of water circulation.

6. Specific Reporting Requirements:

See Section F, Conditions 5, 6, 7 and 8.

7. Specific Control Equipment Operating Conditions:

a) The control equipment shall be operated in accordance with manufacturer's specifications and/or standard operating practices.

b) See Section E for further requirements

SECTION C - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to Regulation 401 KAR 50:035, Section 5(4). While these activities are designated as insignificant, the permittee must comply with the applicable regulation(s). Process and emission control equipment at each insignificant activity subject to a generally applicable regulation shall be inspected monthly and a qualitative visible emissions evaluation made. The results of the inspections and observations shall be recorded in a log, noting color, duration, density (heavy or light), cause and corrective actions taken for any abnormal visible emissions.

	Description	Generally Applicable Regulation
1.	Fire Water Pumps (2) Diesel Fired (1) Electric	None
2.	Maintenance Shop Activities	None
3.	Fuel Oil Storage Tanks	401 KAR 59:050
4.	Miscellaneous Water Storage Tanks	None
5.	FGD Solid Waste By-product Handling and Long-term Storage	None
6.	Diesel Fired Emergency Generator	None
7.	Ammonia Tanks	401 KAR 68

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

1) PM/PM_{10}, sulfur dioxide, nitrogen oxides and visible (opacity) emissions, as measured by methods referenced in Regulation 401 KAR 50:015, Section 1, shall not exceed the respective limitations specified herein.

2) The PCBs shall be performance tested initially for compliance with the emission standards for particulate matters (PM and PM10); sulfur dioxide (SO_2); nitrogen oxides (NO_x); and carbon monoxide (CO), as referenced by Methods in 401 KAR 50:015.

3) After the initial compliance test as stated above, continuing compliance with the emission standards shall be determined by continuous emission monitors for Opacity, NO_x, and SO_2. Ongoing compliance with the emission standard for CO shall be determined by monitoring for Carbon Dioxide (CO_2) or Oxygen and comparing these monitored values to the initial compliance test baseline values.

SECTION E - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

Pursuant to Regulation 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS

1. When continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
   a. Date, place as defined in this permit, and time of sampling or measurements.
   b. Analyses performance dates;
   c. Company or entity that performed analyses;
   d. Analytical techniques or methods used;
   e. Analyses results; and
   f. Operating conditions during time of sampling or measurement.

   [Material incorporated by reference by 401 KAR 52:020, Section 1b (IV)1]

2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality. [Material incorporated by reference by 401 KAR 52:020, Sections 1b(IV) 2 and 1a(8)]

3. In accordance with the requirements of 401 KAR 52:020 Section 3(1)h the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:

   a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
   b. To access and copy any records required by the permit:
   c. Inspect, at reasonable times, any facilities, equipment (including monitoring and pollution control equipment), practices, or operations required by the permit. Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.
   d. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.

   Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.

4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

5. Summary reports of any monitoring required by this permit, other than continuous emission or opacity monitors, shall be submitted to the Division's Owensboro Regional Office at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring

SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS

requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation. [Material incorporated by reference by 401 KAR 52:020, Section 1b (V)1.]

The semi-annual reports are due prior to January 30th and July 30th of each year. Data from the continuous emission and opacity monitors shall be reported to the Technical Services Branch in accordance with the requirements of 401 KAR 59:005, General Provisions, Section 3(3). All reports shall be certified by a responsible official pursuant to 401 KAR 52:020 Section 23. All deviations from permit requirements shall be clearly identified in the reports.

6. a. In accordance with the provisions of 401 KAR 50:055, Section 1 the owner or operator shall notify the Division for Air Quality's Owensboro Regional Office concerning startups, shutdowns, or malfunctions as follows:

   i. When emissions during any planned shutdowns and ensuing startups will exceed the standards notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
   ii. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards notification shall be made as promptly as possible by telephone (or other electronic media) and shall cause written notice upon request.

   b. The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.6a. above) to the Division for Air Quality's Owensboro Regional Office within 30 days. Other deviations from permit requirements shall be included in the semiannual report required by Section F.5. Material incorporated by reference by 401 KAR 52:020, Section 1b V 3, 4.

7. Pursuant to 401 KAR 52:020, Permits, Section 21, the permittee shall certify compliance with the terms and conditions contained in this permit, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an approved alternative) to the Division for Air Quality's Owensboro Regional Office and the U.S. EPA in accordance with the following requirements:

   a. Identification of the term or condition;
   b. Compliance status of each term or condition of the permit;
   c. Whether compliance was continuous or intermittent;
   d. The method used for determining the compliance status for the source, currently and over the reporting period, and
   e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance

SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS

certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.

f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications should be mailed to the following addresses:

Division for Air Quality
Owensboro Regional Office
3032 Alvey Park Dr. W.
STE 700
Owensboro, KY 42303-2191

U.S. EPA Region IV
Air Enforcement Branch
Atlanta Federal Center
61 Forsyth St.
Atlanta, GA 30303-8960

Division for Air Quality
Central Files
803 Schenkel Lane
Frankfort, KY 40601

8. In accordance with 401 KAR 52:020, Section 22, the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KEIS emission report is mailed to the permittee.

9. Pursuant to Section VII.3 of the policy manual of the Division for Air Quality as referenced in 401 KAR 50:016, Section 1(1), results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days after the completion of the fieldwork.

SECTION G - GENERAL PROVISIONS

(a) General Compliance Requirements

1. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:020 and of the Clean Air Act and is grounds for enforcement action including termination, revocation and reissuance, revision or denial of a permit. [Material incorporated by reference by 401 KAR 52:020, Section 1a, 3]

2. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition. [Material incorporated by reference by 401 KAR 52:020, Section 1a, 6]

3. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:020, Section 19. The permit will be reopened for cause and revised accordingly under the following circumstances:
   a. If additional requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:020, Section 12;
   b. The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
   c. The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;
   d. If any additional applicable requirements of the Acid Rain Program become applicable to the source.

   Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

4. The permittee shall furnish information upon request by the cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or compliance with the permit. [Material incorporated by reference by 401 KAR 52:020, Section 1a, 7,8]

5. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such facts or corrected information to the permitting authority. [Material incorporated by reference by 401 KAR 52:020, Section 7(1)]

SECTION G - GENERAL PROVISIONS

6. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit. [Material incorporated by reference by 401 KAR 52:020, Section 1a, 14]

7. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance. [Material incorporated by reference by 401 KAR 52:020, Section 1a, 4]

8. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens of the United States. [Material incorporated by reference by 401 KAR 52:020, Section 1a, 15)b]

9. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6). [Material incorporated by reference by 401 KAR 52:020, Section 1a, 10]

10. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance. [401 KAR 52:020, Section 11(3)(b)]

11. This permit does not convey property rights or exclusive privileges. [Material incorporated by reference by 401 KAR 52:020, Section 1a, 9]

12. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Kentucky Cabinet for Natural Resources and Environmental Protection or any other federal, state, or local agency.

13. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry. [401 KAR 52:020, Section 11(3)(d)].

14. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders. [401 KAR 52:020, Section 11(3)(a)]

15. Permit Shield - A permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of a permit shall be considered compliance with:

    (a) Applicable requirements that are included and specifically identified in the permit and
    (b) Non-applicable requirements expressly identified in this permit.

SECTION G - GENERAL PROVISIONS

16. Emission limitations listed in this permit shall apply at all times except during periods of startup, shutdown, or malfunctions, and opacity limitations listed in this permit shall apply at all times except during periods of startup and shutdown in accordance with Regulation 401 KAR 50:055, provided the permittee complies with the requirements of Regulation 401 KAR 50:055.

17. Pursuant to Section VII 2(1) of the policy manual of the Division for Air Quality as referenced by Regulation 401 KAR 50:016, Section 1(1), at least one month prior to the date of the required performance test, the permittee shall complete and return a Compliance Test Protocol (Form DEP 6027) to the Division's Frankfort Central Office and the Division's Technical Services Branch. Pursuant to Regulation 401 KAR 50:045, Section 5, the Division shall be notified of the actual test date at least ten (10) days prior to the test.

(b) Permit Expiration and Reapplication Requirements

1. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division. [401 KAR 52:020, Section 12]

2. The authority to operate granted shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets. [401 KAR 52:030 Section 8(2)]

(c) Permit Revisions

1. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:020, Section 14(2).

2. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

SECTION G - GENERAL PROVISIONS

(d) Construction, Start-Up, and Initial Compliance Demonstration Requirements

1. Construction of process and/or air pollution control equipment authorized by this permit shall be conducted and completed only in compliance with the conditions of this permit.

2. Within thirty (30) days following completion and within fifteen (15) days following start-up and attainment of the maximum production rate specified in the permit application, or within fifteen (15) days following the issuance date of this permit, whichever is later, the permittee shall furnish to the Division for Air Quality's Owensboro Regional Office in writing, with a copy to the Division's Frankfort Central Office, notification of the following:
   a. The date when construction commenced.
   b. The date of start-up of the affected facilities listed in this permit.
   c. The date when the maximum production rate specified in the permit application was achieved.

3. Pursuant to 401 KAR 52:020, Section 3(2), unless construction is commenced within eighteen (18) months after the permit is issued, or begins but is discontinued for a period of eighteen (18) months or is not completed within a reasonable timeframe then the construction and operating authority granted by this permit for those affected facilities for which construction was not completed shall immediately become invalid. Upon written request, the cabinet may extend these time periods if the source shows good cause.

4. Operation of the affected facilities for which construction is authorized by this permit shall not commence until compliance with the applicable standards specified herein has been demonstrated pursuant to 401 KAR 50:055, except as provided in Section I of this permit.

5. This permit shall allow time for the initial start-up, operation, and compliance demonstration of the affected facilities listed herein. However, within sixty (60) days after achieving the maximum production rate at which the affected facilities will be operated but not later than 180 days after initial start-up of such facilities, the permittee shall conduct a performance demonstration (test) on the affected facilities for particulate matter; sulfur dioxide (SO_2); nitrogen oxides (NO_x); carbon monoxide (CO); fluoride as HF; beryllium; and mercury (Hg), in accordance with 401 KAR 50:055, General compliance requirements. These performance tests must also be conducted in accordance with General Provisions G(d)6 of this permit and the permittee must furnish to the Division for Air Quality's Frankfort Central Office a written report of the results of such performance test.

6. Pursuant to Section VII 2.(1) of the policy manual of the Division for Air Quality as referenced by 401 KAR 50:016, Section 1.(1), at least one month prior to the date of the required performance test, the permittee shall complete and return a Compliance Test Protocol (Form DEP 6027) to the Division's Frankfort Central Office. Pursuant to 401 KAR 50:045, Section 5, the Division shall be notified of the actual test date at least ten (10) days prior to the test.

SECTION G - GENERAL PROVISIONS

(e) Acid Rain Program Requirements

1. If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

2. The source shall comply with all requirements and conditions of the Title IV, Acid Rain Permit contained in Section J of this document and the Phase II permit application (including the Phase II NO_x compliance plan, if applicable) issued for this source. The source shall also comply with all requirements of any revised or future acid rain permit(s) issue to this source.

(f) Emergency Provisions

1. Pursuant to 401 KAR 52:020 Section 24(1), an emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:

   a. An emergency occurred and the permittee can identify the cause of the emergency;
   b. The permitted facility was at the time being properly operated;
   c. During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
   d. The permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division within ten (10) working days of the time when emission limitations were exceeded due to the emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
   e. This requirement does not relieve the source from other local, state or federal notification requirements.

2. Emergency conditions listed in General Condition (f)1 above are in addition to any emergency or upset provision(s) contained in an applicable requirement. [401 KAR 52:020, Section 24(3)]

3. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof. [401 KAR 52:020, Section 24(2)]

SECTION G - GENERAL PROVISIONS

(g) Risk Management Provisions

1. The permittee shall comply with all applicable requirements of 401 KAR 68, Chemical Accident Prevention. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

   RMP Reporting Center
   P.O. Box 3346
   Merrifield, VA, 22116-3346

2. If requested, submit additional relevant information to the Division or the U.S. EPA.

(h) Ozone depleting substances

1. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
   a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
   b. Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
   c. Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
   d. Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166.
   e. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
   f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
2. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

SECTION H - ALTERNATE OPERATING SCENARIO

None

SECTION I - COMPLIANCE SCHEDULE

None

SECTION J- ACID RAIN

PHASE II ACID RAIN PERMIT

ACID RAIN PERMIT CONTENTS

1) Statement of Basis

2) SO_2 allowances allocated under this permit and NOx requirements for each affected unit.

3) Comments, notes and justifications regarding permit decisions and changes made to the permit application forms during the review process, and any additional requirements or conditions.

4) The permit application submitted for this source. The owners and operators of the source must comply with the standard requirements and special provisions set forth in the Phase II Application.

5) Summary of Actions

- **Statement of Basis:**

Statutory and Regulatory Authorities: In accordance with KRS 224.10-100 and Titles IV and V of the Clean Air Act, the Kentucky Natural Resources and Environmental Protection Cabinet, Division for Air Quality issues this permit pursuant to Regulations 401 KAR 50:035, Permits, 401 KAR 50:072, Acid Rain Permit, and Federal Regulation 40 CFR Part 76.

SECTION J- ACID RAIN

PERMIT (Conditions)

Plant Name: Thoroughbred Generating Station
Affected Unit: 01

- **SO_2 Allowance Allocations and NO_x Requirements for the affected unit:**

SO_2 Allowances	**Year**				
	2002	2003	2004	2005	2006
Tables 2, 3 or 4 of 40 CFR Part 73	0*	0*	0*	0*	0*

NO_x Requirements	
NO_x Limits	N/A**

* For newly constructed units, there are no SO2 allowance per USEPA Acid Rain Program

** This unit currently does not have applicable NO_x limits set by 40 CFR, part 76**.**

SECTION J- ACID RAIN

PERMIT (Conditions)

Plant Name: Thoroughbred Generating Station
Affected Unit: 02

- **SO_2 Allowance Allocations and NO_x Requirements for the affected unit:**

SO_2 Allowances	**Year**				
	2002	2003	2004	2005	2006
Tables 2, 3 or 4 of 40 CFR Part 73	0*	0*	0*	0*	0*

NO_x Requirements	
NO_x Limits	N/A**

* For newly constructed units, there are no SO2 allowance per USEPA Acid Rain Program

** This unit currently does not have applicable NO_x limits set by 40 CFR, part 76**.**

SECTION J- ACID RAIN

PERMIT (Conditions)

- **Comments, Notes, and Justifications:**

  The two (2) pulverized coal fired boilers, units 01 and 02 will be constructed after the SO_2 allocation date; therefore these units will have no SO_2 allowances allocated by U.S. EPA and must obtain offsets.

  The two (2) pulverized coal fired boilers, units 01 and 02 do not have applicable NO_x limits set by 40 CFR part 76.

- **Permit Application:** Attached
  The Phase II Permit Application is a part of this permit and the source must comply with the standard requirements and special provisions set forth in the Phase II Application.

- **Summary of Actions:**

  Previous Action:

  None

  Present Action:

  1. Draft Permit has been advertised for public comment.